

# THE AMERICAN JOURNAL OF PATHOLOGY

*Official Publication of*  
*The American Association of Pathologists and Bacteriologists*

## BOARD OF EDITORS

CARL V. WELLER, EDITOR-IN-CHIEF	
MALCOLM H. SOULE, ASSISTANT EDITOR	
J. HAROLD AUSTIN	TRACY B. MALLORY
PAUL R. CANNON	SHIELDS WARREN
HOWARD T. KARSNER	HARRY M. ZIMMERMAN

VOLUME XX

1944

ANN ARBOR  
MICHIGAN  
U. S. A.

COPYRIGHT, 1944  
BY THE AMERICAN ASSOCIATION OF  
PATHOLOGISTS AND BACTERIOLOGISTS

PRINTED AT THE ANN ARBOR PRESS  
ANN ARBOR, MICHIGAN, U.S.A.

PLU

CONTENTS OF VOLUME XX

1944

JANUARY, 1944. NUMBER 1

TRANSPLANTABLE OSTEOGENIC SARCOMAS INDUCED IN RATS BY FEEDING RADIUM. <i>Charles E. Dunlap, Joseph C. Aub, Robley D. Evans and Robert S. Harris.</i> Plates 1-3 . . . . .	1
ADAMANTOBLASTOMAS IN THE SLYE STOCK OF MICE. <i>Edward V. Zegarelli.</i> Plates 4-17 . . . . .	23
EXPERIMENTAL THROMBOTIC BACTERIAL (STREPTOCOCCUS VIRIDANS) ENDOCARDITIS. I. ITS PRODUCTION AND INCIDENCE IN THE RABBIT. <i>Leo Loewe, Philip Rosenblatt and Max Lederer.</i> Plate 18 . . . . .	89
PROGRESSIVE EXPERIMENTAL ENDOCARDITIS LENTA. <i>Ward J. MacNeal, Martha Jane Spence and Alice E. Slavkin.</i> Plates 19-25 . . . . .	95
ACUTE GENERALIZED MILIARY TUBERCULOSIS. <i>Oscar Auerbach</i> . . . . .	121
CONGENITAL ABSENCE OF THE PERICARDIUM. REPORT OF A CASE. <i>Ensio K. F. Ronka and Carl F. Tessmer.</i> Plate 26 . . . . .	137
CARCINOID TUMOR OF THE CECUM WITH METASTASIS. <i>Eugene B. Potter and Jack M. Docter.</i> Plate 27 . . . . .	143
CEROID, THE PIGMENT OF DIETARY CIRRHOSIS OF RATS. ITS CHARACTERISTICS AND ITS DIFFERENTIATION FROM HEMOFUSCIN. <i>K. M. Endicott and R. D. Lillie</i> . . . . .	149
FURTHER STUDIES ON THE PREGLOMERULAR CELLULAR APPARATUS. <i>Charles Oberling.</i> Plates 28-31 . . . . .	155
GENERALIZED VACCINIA WITH DUAL VIRUS INFECTION. A CASE REPORT. <i>Oscar J. Wollenman, Jr.</i> . . . . .	173
OBSERVATIONS ON THE STRUCTURE OF BONE IN ESTROGEN-TREATED COCKS AND DRAKES. <i>Walter Landauer and Bernhard Zondek.</i> Plates 32-37 . . . . .	179
EXPERIMENTAL STUDIES IN CARDIOVASCULAR PATHOLOGY. VIII. LATE VASCULAR REACTIONS OF HISTAMINE SHOCK IN DOGS. <i>W. C. Hueper and C. T. Ichniowski.</i> Plates 38-40 . . . . .	211

MARCH, 1944. NUMBER 2

CONCRETIONS IN THE ANTERIOR PITUITARY LOBE OF THE HUMAN EMBRYO AND THE NEWBORN. <i>Alfred Plaut and Eleanor Galenson.</i> Plates 41-44 . . . . .	223
THE TESTIS IN VITAMIN E-DEFICIENT GUINEA-PIGS. <i>Alwin M. Pappenheimer and Claudia Schogoleff.</i> Plate 45 . . . . .	239
THE PROTRACTED EFFECT OF A SINGLE DOSE OF DL-ALPHA-TOCOPHEROL ACETATE UPON THE TESTES OF RATS ON VITAMIN E-DEFICIENT DIET. <i>Hans Kaunitz, Alwin M. Pappenheimer and Claudia Schogoleff.</i> Plates 46, 47 . . . . .	247
CHRONIC EQUINE ENCEPHALITIS. <i>Harold H. Noran.</i> Plate 48 . . . . .	259
MENINGOCOCCAL ENDOCARDITIS IN IMMUNIZED HORSES. <i>John K. Miller</i> . . . . .	269
CULTURAL CHARACTERISTICS OF A HEMANGIOENDOTHELIOMA. <i>Margaret R. Murray and Arthur Purdy Stout.</i> Plates 49-51 . . . . .	277
STUDIES ON THE DECALCIFICATION OF BONE. <i>R. D. Lillie</i> . . . . .	291
TOOTH BUDS AND JAWS IN PATIENTS WITH CONGENITAL SYPHILIS. CORRELATION BETWEEN DISTRIBUTION OF TREPONEMA PALLIDUM AND TISSUE REACTION. <i>William H. Bauer.</i> Plates 52-56 . . . . .	297
DEFECT OF ENDOCARDIAL CUSHION DEVELOPMENT AS A SOURCE OF CARDIAC ANOMALY. A PRESENTATION OF FOUR CASES FROM AUTOPSY REPORTS. <i>A. W. McCullough and E. L. Wilbur</i> . . . . .	321

EFFECTS OF POTASSIUM IODIDE ON THE SKELETAL TISSUES OF GROWING MICE. <i>Martin Silberberg and Ruth Silberberg.</i> Plate 57	329
STUDIES ON AMEBOID MOTION AND SECRETION OF MOTOR END-PLATES. III. EXPERIMENTAL HISTOPATHOLOGY OF MOTOR END-PLATES PRODUCED BY QUININE, CURARE, PROSTIGMINE, ACETYLCHOLINE, STRYCHNINE, TETRAETHYL LEAD, AND HEAT. <i>Eben J. Carey.</i> Plates 58-75	341
PULMONARY MUCOUS EPITHELIAL HYPERPLASIA (PULMONARY ADENOMATOSIS). A REPORT OF TWO CASES. <i>Edgar B. Taft and Donald A. Nickerson.</i> Plates 76-79	395
NEURILEMOMAS IN A FAMILY OF BROOK TROUT. <i>George A. Young, Jr., and Peter Olafson.</i> Plates 80, 81	413
ADENOMA OF THE BOVINE BLADDER. <i>Robert F. Langham, Frank Thorp, Jr., and E. T. Hallman.</i> Plates 82, 83	421

## MAY, 1944. NUMBER 3

FATAL HERPES SIMPLEX ENCEPHALITIS IN MAN. <i>C. J. D. Zarafonetis, J. E. Smadel, J. W. Adams and W. Haymaker.</i> Plates 84, 85	429
INFECTION OF HUMAN SKIN, GRAFTED ON THE CHORIOALLANTOIS OF CHICK EMBRYOS, WITH THE VIRUS OF HERPES ZOSTER. <i>Ernest W. Goodpasture and Katherine Anderson.</i> Plate 86	447
EXPERIMENTAL INFECTION OF THE CHICK EMBRYO WITH VIRULENT AND AVIRULENT PASTEURELLA PESTIS. <i>E. Jawetz and K. F. Meyer.</i> Plate 87	457
✓ THE PATHOLOGY OF FATAL EPIDEMIC HEPATITIS. <i>Baldwin Lucké.</i> Plates 88-120	471
✓ THE STRUCTURE OF THE LIVER AFTER RECOVERY FROM EPIDEMIC HEPATITIS. <i>Baldwin Lucké.</i> Plates 121-124	595
SARCOIDOSIS OF THE SPLEEN. REPORT OF A CASE WITH AUTOPSY AND A STUDY OF INTRACELLULAR "ASTEROID BODIES." <i>Melvin Friedman.</i> Plates 125, 126	621
HISTOLOGY OF CEREBRAL LESIONS PRODUCED BY FOCUSED ULTRASOUND. <i>John G. Lynn and Tracy J. Putnam.</i> Plates 127-129	637
STUDIES ON THE HEMORRHAGIC AGENT 3,3'-METHYLENEBIS (4-HYDROXYCOMARIN). IV. THE PATHOLOGIC FINDINGS AFTER THE ADMINISTRATION OF DICUMAROL. <i>John C. McCarter, James B. Bingham and Ovid O. Meyer.</i> Plate 130	651
EXTRACTS FROM MINUTES OF THE MEETING OF THE COUNCIL OF THE AMERICAN ASSOCIATION OF PATHOLOGISTS AND BACTERIOLOGISTS	663

## JULY, 1944. NUMBER 4

CALCIFICATION OF THE MEDIA OF THE HUMAN AORTA AND ITS RELATION TO INTIMAL ARTERIOSCLEROSIS, AGEING AND DISEASE. <i>Herman T. Blumenthal, A. I. Lansing and Paul A. Wheeler.</i> Plates 131-134	665
CUSHING'S SYNDROME WITH POSSIBLE PHEOCHROMOCYTOMA. REPORT OF A CASE. <i>Philip M. LeCompte.</i> Plates 135, 136	689
KERATODERMIA BLENNORRHAGICUM. REPORT OF CASE WITH AUTOPSY. <i>Jesse L. Carr and Melvin Friedman.</i> Plates 137, 138	709
PERIARTERITIS NODOSA IN EXPERIMENTAL HYPERTENSIVE RATS AND DOGS. <i>Carl C. Smith, Pearl M. Zeek and Johnson McGuire.</i> Plates 139, 140	721
REACTIONS OF THE BLOOD AND ORGANS OF DOGS AFTER INTRAVENOUS INJECTIONS OF SOLUTIONS OF METHYL CELLULOSES OF GRADED MOLECULAR WEIGHTS. <i>W. C. Hueper.</i> Plates 141-144	737
SPONTANEOUS AND TRANSPLANTED RETICULUM CELL SARCOMAS IN WISTAR RATS. <i>E. J. Farris and E. H. Yeakel.</i> Plates 145, 146	773

## CONTENTS

v

NONSUPPURATIVE NODULAR PANNICULITIS (WEBER-CHRISTIAN'S DISEASE).	
<i>David M. Spain and Joseph M. Foley.</i> Plate 147 . . . . .	783
MULTIPLE PRIMARY LIPOSARCOMAS. <i>Lauren V. Ackerman.</i> Plates 148, 149 .	789
TRUE HERMAPHRODITISM. REPORT OF A CASE WITH MAMMARY CARCINOMA.	
<i>John D. Moriarty.</i> Plates 150, 151 . . . . .	799
THE EFFECTS OF 3,4 BENZPYRENE ON WOUND REPAIR IN THE SKIN OF MICE.	
<i>Martin Silberberg and Ruth Silberberg</i> . . . . .	809

## SEPTEMBER, 1944. NUMBER 5

THE DEVELOPMENT OF HEPATIC CIRRHOSIS IN DOGS AFTER HYPOPHYSECTOMY. ITS ASSOCIATION WITH UNANTICIPATED, COINCIDENTAL HYPOTHALAMIC INJURY. <i>Irving Graef, Juan Negrin, Jr., and Irvine H. Page.</i> Plates 152-155 . . . . .	823
THE INFLUENCE OF AN ACTIVATED STEROL ON BLOOD PRESSURE IN DOGS. <i>R. G. Mrazek, R. J. Jensik and C. I. Reed</i> . . . . .	857
FEMINIZATION IN MALE DOGS. A SYNDROME ASSOCIATED WITH CARCINOMA OF THE TESTIS AND MIMICKED BY THE ADMINISTRATION OF ESTROGENS. <i>R. M. Mulligan.</i> Plate 156 . . . . .	865
MULTIPLE DIFFUSE FIBROSARCOMA OF BONE. <i>Paul E. Steiner.</i> Plates 157-159	877
PRIMARY CARCINOMA OF THE LIVER WITH METASTASES TO BONE. REPORT OF A CASE. <i>Meta A. Neumann.</i> Plates 160-162 . . . . .	895
BRONCHIOLAR ORIGIN OF "ALVEOLAR CELL TUMOR" OF THE LUNG. <i>Peter A. Herbut.</i> Plates 163-165 . . . . .	911
PROLIFERATIVE ACTIVITY IN BRUNNER'S GLANDS. <i>Philip H. Hartz and Ary van der Sar.</i> Plates 166-168 . . . . .	931
STUDIES ON THE EARLY CHANGES IN THE LIVERS OF RATS TREATED WITH VARIOUS TOXIC AGENTS, WITH ESPECIAL REFERENCE TO THE VASCULAR LESIONS. I. THE HISTOLOGY OF THE RAT'S LIVER IN URETHANE POISONING. <i>L. Doljanski and A. Rosin.</i> Plates 169-171 . . . . .	945
STUDIES ON AMEBOID MOTION AND SECRETION OF MOTOR END-PLATES. IV. ANATOMIC EFFECTS OF POLIOMYELITIS ON THE NEUROMUSCULAR MECHANISM IN THE MONKEY. <i>Eben J. Carey.</i> Plates 172-183 . . . . .	961
CONGENITAL GASTRO-ENTERIC CYSTS OF THE MEDIASTINUM. A REVIEW AND REPORT OF A CASE. <i>Harry G. Olken.</i> Plates 184, 185 . . . . .	997
DIFFUSE GLOMERULONEPHRITIS FOLLOWING REVACCINATION FOR SMALLPOX. <i>Peter A. Herbut.</i> Plates 186, 187 . . . . .	1011

## NOVEMBER, 1944. NUMBER 6

THE MORPHOGENESIS AND SIGNIFICANCE OF DEGENERATIVE VERRUCAL ENDOCARDIOSIS (TERMINAL ENDOCARDITIS, ENDOCARDITIS SIMPLEX, NON-BACTERIAL THROMBOTIC ENDOCARDITIS). <i>Arthur C. Allen and Jonas H. Sirota.</i> Plates 188-192 . . . . .	1025
CHRONIC GRANULOMA ASSOCIATED WITH PERIARTERITIS NODOSA. REPORT OF A CASE WITH RENAL FAILURE. <i>Stuart Lindsay, P. M. Aggeler and S. P. Lucia.</i> Plates 193-196 . . . . .	1057
TWENTY-YEAR CUMULATIVE INDEX, VOLUMES I-XX (1925-1944):	
INDEX OF SUBJECTS . . . . .	1075
INDEX OF AUTHORS . . . . .	1213